APPLICATION OF METHYL IODIDE VIA BURIED DRIP IRRIGATION

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Methyl Iodide is a single compound, which we think is a total drop-in replacement for methyl bromide. We have previously reported on application of methyl iodide via normal injection methods and also via hot gas methods. Because of the solubility of methyl iodide in water (14 grams/ liter) we are experimenting with the application of methyl iodide to a preformed and tarped bed through a buried drip system. We expect this method would reduce the amount of chemical applied and it could also reduce emissions. The need for use of an emulsifying agent in this case is redundant because of the solubility of the chemical.

We have begun these experiments in field plots located at the Desert Research and Education Center of the University of California near Holtville, California. The crop was cantaloupe and the fungal pathogen, which can devastate the melons, was *Monosporascus cannonballus*. The site was naturally infested with the pathogen. Treatments of 100 foot beds were carried out on March 31, 2000 and planting was April 11, 2000. The appropriate amount of methyl iodide was dissolved in water contained in A large tank and pumped into the drip system at two rates, 200 and 300 lbs/acre based on 54" beds. Treatments were replicated, randomized and included untreated controls. Normal cultivation practices for this crop were followed with final harvest taking place on July 6, 2000.

Very good control was observed with both treatments relative to the untreated controls.